

RADIO FREQUENCY INTEGRATED CIRCUIT HAVING SECTIONAL ESD
PROTECTION

ABSTRACT OF THE DISCLOSURE

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A radio frequency integrated circuit (RFIC) having sectional electrostatic discharge (ESD) protection includes an analog receive section, an analog transmit section, a digital section, a first inductor assembly and a second inductor assembly. The analog receive section is operably coupled to convert inbound RF signals into inbound
10 low IF signals and includes an analog receive ground connection. The analog transmit section is operably coupled to convert outbound low IF signals into outbound RF signals and includes an analog transmit ground connection. The digital section is operably coupled to convert the inbound low IF signals into inbound digital baseband signals and to convert outbound digital baseband signals into the outbound low IF signals, wherein
15 the digital section has a digital ground connection. The first inductor assembly operably couples the analog receive ground connection to the digital ground connection. The second inductor assembly operably couples the analog transmit ground connection to the digital ground connection.